Cylindrical Li-ion Battery Pack

Specification

MODEL:ICR186503S200F011A1

Prepared/Date	Approved/Date
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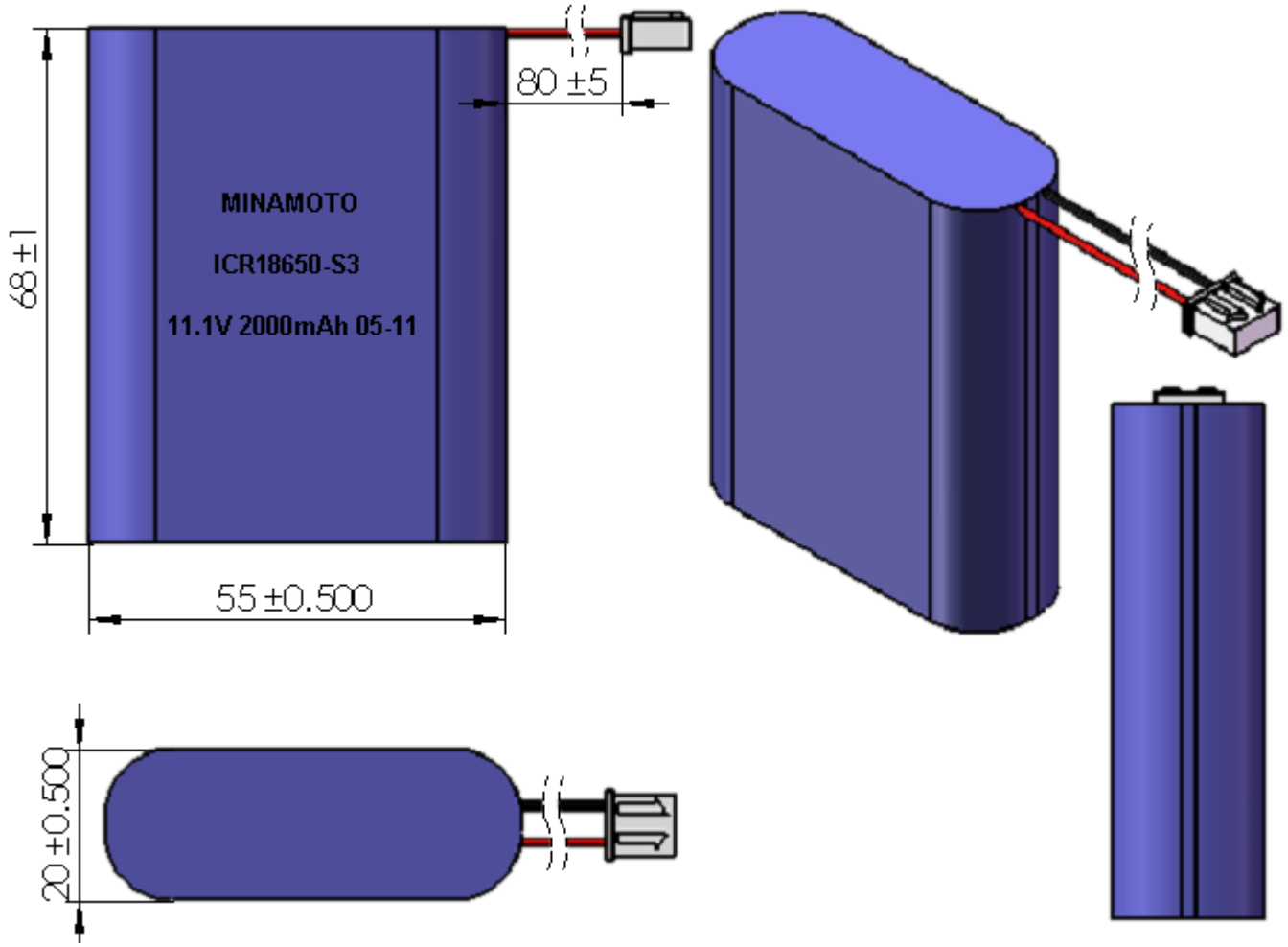
2011-5-18	2011-5-18

Customer:_____ DLG: **David zhao**

1、Cylindrical Li-ion Battery pack Specifications：

Model	ICR186503S200F011A1
Nominal Voltage	11.1V
Weight	≤160g
Pack Dimension	Drawing
Standard Charge	Constant Current 400mA Constant Voltage 12.60V 20mA Cut-off（23±2℃）
Fast Charge	Constant Current 1000mA Constant Voltage 12.6V 20mA Cut-off（23±2℃）
Standard discharge	Constant Current 400mA end Voltage 8.25V （23±2℃）
Fast discharge	Constant Current 1000mA end Voltage 8.25V （23±2℃）
Rated Capacity	2000mAh （Standard Charge then Standard discharge）
Fast discharger capacity	1950mAh （Standard Charge then Fast discharge）
Cycle Life	Standard Charge，rest 10min, Standard discharge. A cycles defined as one charge and discharge. Carry out cycles until discharge capacity <80% C_5mAh , cycle life ≥300
Maximum Continuous charge Current	2000mA
Maximum Continuous Discharge Current	4000mA
Impedance（23±2℃）	<350mΩ
BMS	In side
Storage Temperature Range	Temperature(15-35℃); Relative humidity (45-75%); Pressure (86-106KPa)
Charge Temperature Range	0-45℃
Operation Temperature Range	-20-60℃

2、Battery combinations and size:



3、Handling Precaution and Prohibitions of Lithium Ion Rechargeable Cells and Batteries:

Inaccurate handling of lithium ion rechargeable battery may cause leakage, heat, smoke, an explosion, or fire. This could cause deterioration of performance or failure. Please be sure to follow instructions carefully.

1.1 Storage

Store the battery at low temperature (below 20℃ is recommended), low humidity, no dust and no corrosive gas atmosphere.

1.2 Safety precaution and prohibitions

To assure product safety, describe the following precautions in the instruction manual of the application.

[Danger!]

■ Electrical misusage

Use dedicated charger.

Use or charge the battery only in the dedicated application.

Don't charge the battery by an electric outlet directly or a cigarette lighter charger.

Don't charge the battery reversely.

■ Environmental misusage

Don't leave the battery near the fire or a heated source.

Don't throw the battery into the fire.

Don't leave, charge or use the battery in a car or similar place where inside of temperature may be over 60℃.

Don't immerse, throw, wet the battery in water / seawater.

■ Others

Don't store the battery in a pocket or a bag together with metallic objects such as keys, necklaces, hairpins, coins, or screws.

Don't short circuit (+) and (-) terminals with metallic object intentionally.

Don't heat partial area of the battery with heated objects such as soldering iron.

Don't hit with heavy objects such as a hammer, weight.

Don't step on the battery and throw or drop the battery on the hard floor to avoid mechanical shock.

Don't disassemble the battery or modify the battery design including electric circuit.

Don't use seriously scared or deformed battery.

Don't put the battery into a microwave oven, dryer ,or high-pressure container.

Don't use or assemble the battery with other makers' batteries, different types and/or models of batteries such as dry batteries, nickel-metal hydride batteries, or nickel-cadmium batteries.

[Warning!] Don't use or assemble old and new batteries together.

Stop charging the battery if charging isn't completed within the specified time.

Stop using the battery if the battery becomes abnormally hot, discoloration, deformation, or abnormal conditions is detected during use, charge, or storage.

Keep away from fire immediately when leakage or foul odors are detected.

If liquid leaks onto your skin or cloths, wash well with fresh water immediately. If liquid leaking from the battery gets into your eyes, don't rub your eyes and wash them with clean water and go to see a doctor immediately.

If the terminals of the battery become dirty, wipe with a dry cloth before using the battery. The battery can be used within the following temperature ranges. Don't exceed these ranges.

Charge temperature ranges: 0- 45℃

Discharge Temperature ranges: -20-60℃

Store the battery at temperature below 60℃

[Caution!]

■ Electrical misusage

Battery must be charge with constant current-constant voltage (CC/CV).

Charge current must be controlled by specified value in Cell specification.

Cut-off Voltage of charging must be 4.20V/cell. Charger must stop charging battery by detecting

either charging time or current specified in Cell's specification.
Discharge current must be controlled by specified value in Cell's specification. Cut-off Voltage of discharging must be over 2.75V/cell.

Keep the battery away from babies and children to avoid any accidents such as swallow. If younger children use the battery, their guardians should explain the proper handling method and precaution before using.

Before using the battery, be sure to read the user's manual and precaution of it's handling.

Before using charger, be sure to read the user's manual of the charger.

Before installing and removing the battery from application, be sure to read user's manual of the application.

Replace the battery when using time of battery becomes much shorter than usual. Cover terminals with insulating tape before proper disposal. If the battery is needed to be stored for an long period, battery should be removed from the application and stored in a place where humidity and temperature are low. While the battery is charged, used and stored, keep it away from object materials with static electric chargers.

Safety Handling Procedure for the Transporter

■ Quarantine : Packages that are crushed, punctured or torn open to reveal contents should not be transported. Such packages should be isolated until the shipper has been consulted, provided instructions and, if appropriate, arranged to have the product inspected and repacked.

■ Spilled Product : In the event that damage to packaging results in the release of cells or batteries, the spilled products should be promptly collected and segregated and the shipper should be contacted for instructions.

Design of positioning the battery pack in application and charger

To prevent the deterioration of the battery performance caused by heat, battery shall be positioned away from the area where heat is generated in the application and the charger.

Please contact us when you need any help including safety concerns.

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